

**A coating material licensed by GSB must fulfil the following regulations:**

**General:**

All coating materials must conform strictly to the quality regulations of GSB AL 631.

1. All coating materials (formulations) have to be based on the same chemistry as the binding agents (type of resin and hardener as well as cross-linking ratio). As the binding agent is the largest constituent of a coating material and has a defining influence on the properties of the coating, it should be used to ensure greatest possible product reliability and avoid potential problems with bonding.
2. The selection, optimization and, if necessary, modification of additives as well as the pigments in a formulation are the responsibility of the manufacturer. Modifications are not regarded as changes from a material licence point of view. A new licence is therefore not required. A change of binding agents requires a new approval.
3. GSB-licensed coating materials are classified depending on their weathering behaviour defined in accordance with GSB AL 631:

<b>Florida 1</b>	300 MJ total UV radiation (approx. one year Florida weathering), 50% residual gloss
<b>Florida 3</b>	840 MJ total UV-radiation (approx. three years Florida weathering), 50% residual gloss
<b>Florida 5</b>	1,400 MJ total UV-radiation (approx. five years Florida weathering), 50% residual gloss
<b>Florida 10</b>	(approx. 10 years Florida weathering) 50 % residual gloss

It is the responsibility of the manufacturer to ensure that all coating materials supplied within the scope of a material licence fulfil the weathering resistance criteria in a Florida test in accordance with GSB AL 631.

As is generally known, the material licence simply means that the suitability of a coating material has been tested and confirmed.

4. Only coating materials that are not classified as carcinogenic, germ cell mutagenic or toxic for reproduction (CMR) (in each case "category 1" according to the classification criteria of the "CLP Regulation" (EU) No. 1272/2008) can be submitted for material approvals. This corresponds to a labelling of the coating materials with the H-phrases H340 / H350 or H360. "TGIC", compounds containing lead, cadmium and chromium(VI) are not permitted for the production of the coating materials.
5. For a material licence, the manufacturer can limit the colour range in advance:
  - a) Only specific colours to be defined by the manufacturer are licensed. In this case, the manufacturer can also exclude colours from the licence, for example where the pigments needed to achieve a colour do not have the necessary resistance in Florida weathering.
  - b) Only plain colours are licensed
  - c) Only metallics / special-effect lacquers are licensed
  - d) All colours including metallics are licensed.

These limitations are an inseparable element of the material licence and have to be stipulated in the current product information sheets.

6. The surface finish is a characteristic of every material licence and thus applies to every product covered by a licence. Marketing more than one surface finish under a single material licence is not permitted.

There are:

- **smooth**

or

- **textured surfaces.**

7. The stipulated gloss range is binding for all products covered by the respective material licence. Measurement is carried out using a reflectometer with a radiation angle of 60° in accordance with GSB AL 631. It is the responsibility of the material manufacturer to ensure that all products of a licensed coating material result in reflectometer values that are within the specified tolerance ranges in accordance with GSB AL 631, especially under the processing conditions specified in the information sheet. Measurement of the reflectometer value is not envisaged for coating materials with a textured finish. Evaluation is carried out visually by comparison with a master sample.
8. The curing conditions stated and specified in the material licence are compulsory processing parameters for all products. One has to ensure that all chemical and mechanical properties specified for the coating material can be achieved for all curing conditions specified in the registration form in accordance with GSB AL 631. The GSB administrative office must be informed of any change in curing conditions once the material licence has been issued. Each case will be raised in the GSB GA (Quality Committee). This can lead to an application for a new material licence having to be made. The curing range can be varied by feeding PA rods for certain colours. This requires informing the GSB administrative office and documentation in the product information sheet.
9. At the request of the material manufacturer, a licensed coating material can be produced in different plants. A prerequisite is that the same formulation is used, which has to be confirmed in a legally binding confirmation sent to the GSB administrative office. Negative GSB inspections mean a complete ban for all production facilities.
10. The following system build-ups for multi-layer systems are currently regulated in the quality guidelines:

<b>Basecoat</b>	<b>Topcoat</b>
Powder coating pigmented	Powder coating pigmented
Powder coating pigmented	Powder coating transparent / glaze
Pigmented liquid lacquer	Pigmented liquid lacquer
Pigmented liquid lacquer	Transparent liquid lacquer

The system build-up (clear lacquer, glazes or pigmented lacquers) must always be carried out in combination with the base lacquer in consultation with the coating material manufacturer. The system build-up is limited to the system build-up of one material manufacturer - a combination of paint build-ups from several paint manufacturers is excluded.

For a corresponding GSB material approval for multi-layer systems, only pigmented topcoat systems are approved which already have a corresponding GSB material approval for the single-layer process.

When using transparent topcoats in combination with pigmented basecoats, each individual layer must have a GSB material approval for one-coat systems.

Material approval of system structures that are not currently regulated in the QR (e.g. ETL / top coat) can be requested from the office if required.

11. The requirements given in the information sheet “Minimum Labelling Requirements for Containers for GSB-Licensed Material Systems” have to be observed.

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